

The present invention relates to novel synthetic or natural peptides for use in treating viral or parasitic infections or in the treatment of tumors. The peptides of the present invention are less than 30 amino acids in size, preferably less than 20 amino acids, in particular 15 to 20 amino acids, and *in vitro* the peptides specifically bind a type 2A protein phosphatase holoenzyme or one of its subunits. The invention also relates to a method for identifying said peptides, and to their uses.